

## ABSTRACT OF THE DISCLOSURE

Embodiments of the invention generally provide a method for characterizing the surface topology of a hydrodynamic bearing used with a disc drive. In one embodiment, the invention provides a method to detect at least one hydrodynamic groove disposed on the hydrodynamic bearing. In another embodiment, the invention provides a method to measure the depth of at least one hydrodynamic groove. In still another aspect, the invention provides a method to establish a ratio between the hydrodynamic groove widths and the spacing between adjacent grooves.